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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,503	07/13/2005	Volker Mittendorf	12810-00379-US	5918
23416 7590 12/23/2009 CONNOLLY BOVE LODGE & HUTZ, LLP P O BOX 2207 WILMINGTON, DE 19899				
EXAMINER MCILWAIN, ELIZABETH F				
ART UNIT 1638		PAPER NUMBER		
MAIL DATE 12/23/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,503

Applicant(s)

MITTENDORF ET AL.

Examiner

Elizabeth F. McElwain

Art Unit

1638

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-13, 16, 20-22, 24, 33, 34, 38-40, 47-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-13, 16, 20-22, 24, 33, 34, 38-40 and 47-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Proficiency's Patent Drawing Review (PTO-544)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The amendment filed September 1, 2009 has been entered.

Claims 1-10, 14, 15, 17-19, 23, 25-32, 35-37 and 41-46 are cancelled.

Claims 11, 24, 34 and 38-40 are currently amended.

Claims 48-55 are newly submitted.

Claims 11-13, 16, 20-22, 24, 33, 34, 38-40 and 47-55 are pending and are examined on the merits.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 11-13, 16, 20-22, 24, 33, 34, 38-40 and 47-55 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
3. The claims are drawn to a method of producing a transgenic plant having an increased level of fatty acids in seed by transforming the plant and analyzing the fatty acid content of the seeds of the plant and selecting a transgenic plant with an increased level of fatty acids as compared to an untransformed wild type variety of the plant, wherein the plant is transformed with any one of: SEQ ID NO: 23, a polynucleotide encoding SEQ ID NO: 24, a polynucleotide

having at least 70% sequence identity with a) or b), a polynucleotide encoding a polypeptide having at least 70% identity to SEQ ID NO: 24, or a polynucleotide that hybridizes to the complement of a) or b) under the stated conditions.

4. However, the specification only discloses (at page 68, Table 16 of the specification) seeds of Arabidopsis plants transformed with SEQ ID NO: 23 that do not show an increase in fatty acid content in the transgenic lines. It is noted that the C-24 wild type control has a level of 0.334 gram fatty acids per gram seed weight with a standard deviation of plus or minus 0.030. Therefore, the fatty acid levels in the untransformed control plants range from 0.364 to 0.304, while the transformed plants have levels of 0.331 to 0.343, and do not show an increase in fatty acids in the transformed plants.

5. In addition, Applicants argue in the response that when Dormann et al (Science 284: 2181-2184, 1999) transform plants with the same sequence that no increase in fatty acids was produced relative to wild type plants.

6. Given the unpredictability of increasing fatty acid levels in the seed of a plant that is transformed with SEQ ID NO: 23, as demonstrated by Applicants, in view of the results presented in the specification that do not support the method that is claimed; given the absence of working examples; given that there is no guidance in the specification with regard to how to use the claimed method to produce plants with increased levels of fatty acids; given the breadth of the claims which recite a multitude of different nucleic acid sequences that encode a multitude of amino acid sequences with unspecified activities, and are broadly drawn to any plant species and any increase in fatty acids; and given the state of the prior art which present results that do not

show an increase in fatty acids in transformed plants relative to wild type; it would require undue experimentation by one skilled in the art to make and/or use the claimed invention.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth F. McElwain whose telephone number is (571) 272-0802. The examiner can normally be reached on increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EFM

/Elizabeth F. McElwain/
Primary Examiner, Art Unit 1638